UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte KOSTA L. PELONIS

Appeal No. 2005-2052
Application No. 09/996,842

ON BRIEF

Before TIMM, JEFFREY T. SMITH, and PAWLIKOWSKI, Administrative Patent Judges.

PAWLIKOWSKI, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 1 through 7. A copy of claim 1 is set forth below:

1. A portable heater comprising:

(a) a sealed radiator containing a diathermal fluid, the radiator including a plurality of tubular radiator units, the tubular radiator units having respective upper portions and respective lower portions;

(b) at least one electric heating element positioned within the sealed radiator;

(c) a fan positioned above the sealed radiator for directing air on the upper portions of the tubular radiator units, the fan being effective to cool the upper portions of the

tubular units to enhance thermal convection of the diathermal fluid within the tubular radiator units.

The examiner relies upon the following references as evidence of unpatentability:

Woolley	2,075,323	Mar. 30, 1937
De'Longhi	4,870,253	Sep. 26, 1989

Claims 1 through 7 stand rejected under 35 U.S.C. § 103 as being obvious over De'Longhi in view of Woolley.

On page 3 of the brief, appellants group the claims together. We therefore consider claim 1 in this appeal. See 37 CFR § 41.37(c)(1)(vii)(September 2004); formerly 37 CFR § 1.192(c)(7)(2003). Also see Ex parte Schier, 21 USPQ2d 1016, 1018 (Bd. Pat. App. & Int. 1991).

We have carefully considered appellants' brief[1], the examiner's answer, and the evidence of record. This review has led us to conclude that the examiner's rejection is well founded.

[1] We use the Supplemental Appeal Brief filed on July 16, 2004.

OPINION

I. THE 35 U.S.C. § 103 REJECTION OF CLAIMS 1 THROUGH 7 AS BEING OBVIOUS OVER DE'LONGHI IN VIEW OF WOOLLEY

The examiner's position for this rejection is set forth on pages 3 through 6 of the answer. We refer to the examiner's position as set forth therein, as our own.

The examiner's basic position is that De'Longhi teaches a portable, sealed electrically-heated radiator containing a diathermal fluid within tubular radiator units. The diathermal fluid is heated by an electric heater 4, and thermoventilation unit 6 is mounted adjacent the tubular units that enhances thermal convection. Answer, pages 3-4.

The examiner recognizes that thermoventilation unit 6 (having fan 7) of De'Longhi is positioned at a location different from the position of the fan as recited in appellants' claim 1. That is, appellants' claim 1 recites that the fan is positioned above the sealed radiator.

The examiner relies upon Woolley for teaching to position fans 19 above the radiator unit for directing air onto the radiator units' upper portions to enhance thermal convection. The examiner refers to figure 1 of Woolley and page 1, column 2, lines 27 through 42, in this regard. Answer, page 4.

The examiner concludes that it would have been obvious to have positioned the fan above the tubular radiator unit in De'Longhi, as taught by Woolley, in order to heat a maximum volume of room air and more uniformly distribute heat throughout the room. Answer, page 4.

With regard to the claim recitation of "enhancing thermal convection of a diathermal fluid", the examiner's position is

that this recitation is inherent in the combination of references because mounting a fan above the tubular radiation units of De'Longhi would inherently influence the temperature of the diathermal fluid contained therein. The examiner states, that therefore, such a fan mounting would inherently enhance thermal convection of the fluid. Answer, pages 4-5.

Appellant's position regarding the rejection is set forth on pages 4 through 7 of the brief. Appellant argues that the modification suggested by the examiner would destroy the utility of De'Longhi's invention. Appellant argues that moving the thermoventilation unit 6 from the bottom of the apparatus of De'Longhi, to the top of the apparatus of De'Lonhgi, would cause the unit to no longer be rotated so as to direct heated air substantially parallel and adjacent to the floor of the room. Appellant argues that, instead, heated air would be directed parallel to the floor, but at a height several feet above the floor. Brief, page 6. We are not convinced by this argument for several reasons. As pointed out by the examiner, Woolley specifically teaches to project air downwardly over the heat transferring surfaces of the radiator and discharge air at a predetermined point near the floor of the room to positively heat a maximum volume of room air and to more uniformly distribute heat throughout the room. Hence, one of ordinary skill in the art would adjust the fan to project air downwardly over the heat transferring surfaces of the radiator to heat a maximum volume of air and to provide uniform distribution of

heat, as taught by Woolley.[2] Such an arrangement would not destroy the function of the apparatus of De'Longhi because an object of the invention of De'Longhi is to achieve "uniform air circulation".[3] See column 1, 41-44 of De'Longhi. We also refer to the examiner's response made on pages 9-10 of the answer.

Appellant also argues that when the air is directed downwardly through the radiating elements, room air circulation is likely to be reduced. Appellant argues that the proposed modification would provide a weak stream directed in a plane parallel to the floor, but in all directions. Brief, page 6. We disagree. This assertion is contrary to the teachings of Woolley, and we refer to our footnote 3 in this regard. Also, as discussed, supra (and as discussed by the examiner on page 10 of the answer), the modification would project air downwardly over the heat transferring surfaces of the radiator to heat a maximum volume of air and to provide uniform distribution of heat, as taught by Woolley.

We emphasize that an object of the invention of De'Longhi is to eliminate the considerable long time to reach operating temperature to heat a room by providing a mobile apparatus for heating rooms which has a high yield together with the fact that it can supply heat to the room immediately after its activation. See column 1, lines 19 through 35. A thermoventilation unit is

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[2] The examiner states, on page 9 of the answer, that the relocating of unit 6 of De'Longhi to the top of De'Longhi's apparatus would allow for the pivotal movement of the fan to remain intact.

[3] Woolley teaches "positively heating a maximum volume of the room air, and also most effectively distributing heat uniformly throughout the room". See page 1, column 1, lines 24-35. We are not convinced that such function would impair providing uniform circulation of air in the room, as asserted by appellant.

used for delivery of warm air from the body in a direction substantially orthogonal to the radiator.

Woolley teaches the use of fan 19, depicted in each of figures 1 and 2. These fans are utilized so that air is projected downwardly over the heat transfer surfaces of the radiator and is discharged at a predetermined point near the floor of the room or other space served by the radiator over which the heating cabinet is placed, thereby positively heating a maximum volume of the room air, and also most effectively distributing heat uniformly throughout the room. See column 1, lines 24 through 36 of Woolley.

Hence, De'Longhi and Woolley have similar objectives. That is, the objective is heat a maximum volume of room air and effectively distributing heat. One way of doing this, as disclosed in De'Longhi, is to utilize a thermal ventilation unit 6 having a fan 7 which is able to deliver warm air in a direction substantially orthogonal to the radiator 2. The thermoventilation unit 6 can also be partially rotated about its own axis to direct a flow of air either approximate to the grid 9 or partially against the portion 10 of the radiating element cooperating to heat the diathermal oil contained therein so as to accelerate the attainment of the optimum operating temperature of the heater for the heating of the room. See column 2, lines 43 through 50.

Utilizing the unit 6 of De'Longhi in the manner taught by Woolley would result in a heater with a fan that projects air downwardly over the heat transferring surfaces of the radiator, which is discharged at a predetermined point near the floor of the room, thereby positively heating a maximum volume of room air and also most effectively distributing heat uniformly throughout the room. This would not destroy the objects of De'Longhi, contrary to appellant's assertion.

With regard to the aspect of a claim wherein the fan is effective to cool the upper portions of the tubular units to enhance thermal convection of the diathermal fluid within the tubular radiator units, we agree with the examiner's position that this would be inherent. See the answer, pages 4, 5, and 12. The examiner provides a technical explanation that the air flowing directly on and downwardly over the tubular units would influence the temperature of the diathermal fluid contained therein such that thermal convection is enhanced. In other words, an effect that one of ordinary skill would appreciate. On the otherhand, appellant provides mere attorney argument that the effect on thermal convection depends on the factual specifics such that the limitation is not met by merely arranging the fan as suggested by the examiner. Brief, pages 6-7. Mere attorney argument is not the kind of factual evidence that can rebut the *prima facie* case of obviousness. See In re Wood, 582 F.2d 638, 642, 199 USPQ 137, 140 (CCPA 1978); In re Lindner, 457 F.2d 506, 508, 173 USPQ 356, 368 (CCPA 1972)("mere lawyers' arguments unsupported by factual evidence are insufficient to establish unexpected results").

Finally, with regard to appellant's argument the set of resistors 8 of De'Longhi's thermoventilation unit 6 would have to be turned off, we agree with the examiner's response to this argument, made on page 11 of the answer, and incorporate it as our own.

In view of the above, we affirm the 35 U.S.C. § 103 rejection of claims 1 through 7 as being obvious over the De'Longhi in view of Woolley.

II. CONCLUSION

The art rejection is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a)(1)(iv)(effective September 13, 2004; 69 Fed. Reg. 49960 (August 12, 2004); 1286 Off. Gaz. Pat. Office 21 (September 7, 2004)).

AFFIRMED

CATHERINE TIMM)
Administrative Patent Judge)
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JEFFREY T. SMITH) BOARD OF PATENT
Administrative Patent Judge) APPEALS AND
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BEVERLY A. PAWLIKOWSKI)
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BAP:hh

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